Implementation Plan Executive Summary

The Governors' South Atlantic Action Plan is a regional response to address key environmental, economic, national defense, and cultural issue areas facing the Southeastern U.S. coasts and ocean. The Governors have identified and promoted four priority issue areas that are of mutual importance to the sustainability of the Southeast U.S. region's resources: healthy ecosystems, working waterfronts, clean coastal and ocean waters, and disaster-resilient communities. An Implementation Plan addressing each priority area is being developed and is now in a draft form. The Issue Area Teams, guided by lead state mentors and the Executive Planning Team, with input from stakeholders and other partners, will continue to develop the Implementation Plan over the following months for approval by the Steering Group.

HEALTHY ECOSYSTEMS. Healthy ecosystems are the backbone of the Southeast's thriving coastal communities. To meet the challenges of conserving the biological, economic and cultural diversity of the region, four objectives were identified: regionally-coordinated, compatible and sustainable ecosystem planning and management; assessment of economic development and climate change impacts on the structure and function of coastal habitats; development and employment of science-based land use, coastal, and ocean planning and management; and determination of long-term impacts of and remediation strategies for invasive species.

Implementation steps for the first objective include analyses of existing habitat and marine resource mapping efforts, identification of gaps in those efforts, and development of a coordinated framework through which to map priority resources. Metadata from existing monitoring programs will be collated and compared to identify resource measures of common interest. This information will be used to enhance, inform and coordinate ongoing coastal ecosystem management initiatives.

For the second objective, implementation includes development of a list of anticipated climate change impacts on priority habitats and biological resources as well as vulnerability assessment maps that integrate these impacts for use in multi-state planning efforts. Other actions include evaluation of existing "indices of condition" (e.g., for habitats, ecosystem function, community structure, etc.) to determine suitability for use at a regional scale. These efforts will inform the development of a methodology to forecast regional ecosystem "carrying

capacity" that integrates climate change and cumulative impact assessments from coastal development.

Implementation actions to accomplish the third objective include identification and prioritization of resources in greatest need of conservation that would benefit from regional coastal and marine spatial planning. The Alliance will develop and define ecosystem-based land-use planning strategies that incorporate established methods and policies. Finally, the Alliance will evaluate existing public education and outreach efforts regarding ecosystem health and develop complementary programs where necessary to target specific user groups or incorporate additional information for current target groups.

With regard to the fourth objective that addresses invasive species, implementation steps include evaluation and expansion (where necessary) of invasive species map products and compilation of state invasive species remediation plans that identify mechanisms to prevent future introductions. The identification and engagement of regional species experts for life history information and understanding of gaps in knowledge, surveillance, and alert systems must also be undertaken.

WORKING WATERFRONTS. Growth, environmental degradation, and displacement are some of the issues facing traditional working waterfront communities along the southeastern U.S coastline. Robust working waterfronts that incorporate water-dependent facilities and related shore-side infrastructure that offer access or support facilities for recreation, commerce, research, and other public uses, including military operations and training, are essential to community well-being. Further, major port complexes in the Southeastern U.S. are of vital economic importance to the nation's vast international trade and the region's link to global commerce. The working waterfronts portion of the Implementation Plan incorporates three objectives: enhanced capability of ports and waterfronts through expansion of infrastructure; preservation of traditional uses of working water fronts by balancing public, commercial, port, residential, and military use; and determination of the viability of energy development on natural and human communities. Each objective is focused on a time horizon of 18 – 36 months and in many cases is concurrent with others.

Improving capability of ports through multimodal port expansion that results in economic and environmental viability and capacity is essential to sustaining traditional issues as well as

being successful in the global economy. Specifically, we must document long-range needs through inventorying current infrastructure, determining future needs (20-30 years) and prioritizing those needs and investment opportunities in terms of public, commercial, and military uses. Implementation steps include partnering with key agencies such as port authorities, the military services, NOAA, USGS, environmental networks, and coastal development agencies. Most importantly, these partnerships will be based on supporting community-based mapping, with technical assistance, through interactive maps and decision tools to support local, state, and regional planning for commercial, recreational, and environmental use.

Ensuring sustainable viability of working waterfronts will incorporate public/private partnership opportunities and promotion of use of new and more flexible incentives to sustain traditional waterfront uses, as well as expand on multi-functional human and other (e.g. military, ecotourism, and public access) use of waterfronts. Finally, economic viability will be supported through identification of tax incentive programs for traditional small business, local seafood and fishery co-ops, as well as proactive identification of the effects of infrastructure loss on larger transportation and supporting programs linked to robust comprehensive and local land use planning.

Supporting energy development will focus on suitability of facilities, production, and distribution sites along the region's waterfronts. The Alliance will propose methods and means to develop an appropriate workforce through existing educational systems, ensuring no net loss of military access to traditional training areas, and recreation, and commercial business. The Alliance will also make recommendations on policies that result in balancing energy development with ecological, environmental, economic, and social needs and public expectations.

CLEAN COASTAL AND OCEAN WATERS. The goal of the clean coastal and ocean waters issue area is to enhance the ability of managers to effectively target prevention, enforcement, response, and mitigation activities, and to integrate coastal and ocean observing systems in the Southeastern U.S.. This goal will be achieved by enabling coastal managers and decision-makers to predict, prevent, enforce, respond, and mitigate ecosystem and human health impacts,

as well as by providing consistent data through an integrated coastal and ocean observing and monitoring system.

The first objective identified for this issue area of the Implementation Plan, is to improve watershed management of point and non-point source pollution to reduce impacts to water quality. Initial implementation steps include: establishing a regional technical level work group for the purpose of sharing watershed and water quality improvement processes; improving the ability to model loading coefficients for point and non-point sources of nitrogen in coastal ecosystems using the best available technology and information including climate change information; and developing recommendations on processes and protocols to transfer knowledge and implement best management practices for point and non-point source controls and to encourage smart growth and green infrastructure (including monitoring-based performance measures).

The second objective identified is to enhance the understanding of climate change impacts to water quantity and water quality and develop avoidance, mitigation, and adaptation strategies. The steps to be completed within the first year of the plan include: developing interactive map-based assessment tool(s) to support climate change mitigation and adaptation strategies, developing opportunities and partnerships with Federal, State and local agencies in their sustainability initiatives, and supporting research to study regional water quality impacts due to climate change.

The third objective is to increase data comparability across the region by improving standardization of water quality data collection and reporting and increasing monitoring where needed. The initial implementation steps to achieve this include: establishing a regional level monitoring workgroup to address compatibility among states; cataloging and describing existing nearshore and offshore monitoring programs, designs, and data accessibility; and identifying state and regional monitoring needs and implement monitoring programs to the extent possible through identifiable funding sources.

The final objective identified is to improve marine debris removal programs, especially for abandoned and derelict vessels, traps, equipment, and navigation hazards. The implementation steps determined by the team include: increasing inter-state communication among agencies to aid in identification of owners of abandoned or derelict vessels; establishing a sampling program to estimate the baseline density of marine debris on the shoreline, within open

waters, and in submerged habitats, be capable of detecting significant change at broad and fine scales, and adapt or improve existing marine debris projects to provide complementary data; and developing educational materials on the ramifications of marine debris of all sorts, both from direct and indirect inputs.

DISASTER-RESILIENT COMMUNITIES. The promotion of disaster-resilient communities is the fourth issue area identified by the Alliance. The Southeast U.S. region continues to experience significant weather- and climate-related events that cause significant hardships for the economic, environmental, and social well-being of residents and visitors alike. Both short-term episodic events (e.g., hurricanes and coastal storms) and long-term chronic changes (e.g., climate change and sea level rise) are major concerns for the low-lying Southeastern United States, threatening our coastal communities, a multi-billion tourism industry, coastal and watershed development and infrastructure, and local fishing industries. Emergency responders and community planners must develop and implement strategies to minimize risk to the trillions of dollars worth of insured property and the millions of people that live in our coastal counties. Understanding our vulnerability to and the impacts of storms and climate change will enable coastal and natural resource managers and community decision-makers adapt their management strategies, improve planning and preparedness, and develop mitigation strategies to address impacts to public safety, shoreline change, coastal infrastructure, habitat loss, and species migration. The disaster-resilient communities portion of the Implementation Plan incorporates five objectives: undertake regional and state-specific vulnerability assessments of social, economic and natural resource systems; develop and implement adaptation and mitigation strategies (including retreat) to prepare for climate change impacts; improve post-disaster redevelopment planning at the regional, state, and local community level; identify and implement incentives for encouraging development away from high risk areas; and identify and incorporate management and financial options to address beachfront and estuarine shoreline change.

The South Atlantic Alliance partner states have made significant progress on a sub-regional basis in many of these critical areas. Actions identified to achieve these objectives include the development of (1) a guidance document for coastal hazards adaptation planning by state and local governments, with particular attention on storm surge and sea level threats; (2) a region-wide socio-economic vulnerability assessment and social perception analysis for sea-level

rise impacts; (3) post-disaster redevelopment plans at the regional, state, and local levels to enhance the readiness of communities in anticipation of future hazard events; (4) maps and visualizations of high hazard coastal areas in the region that identify hot spots for focused planning and management applications; and (5) detailed analysis of beachfront and estuarine shoreline change projections and coastal development trends based on state-level efforts to anticipate and minimize impacts of a changing shoreline on the region's communities.

Implementation of the South Atlantic Alliance's disaster-resilient communities actions focus on extending and expanding these state efforts region-wide through the support of applied research on the region's socio-demographics, natural and built environments, and assessment of needs; conduct of directed pilot projects; generation of region-wide standards, guidelines, and protocols for vulnerability assessments, risk analyses and modeling and mapping efforts; and comparison, analysis, and drafting of policy frameworks and management approaches that focus on community adaptation and mitigation strategies.